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'I know the answer'

A Perfect State in Capeverdean*

Fernanda Pratas

In Capeverdean, there is a puzzling temporal reading for some occurrences of *sabe* 'know', as opposed to all eventive and some stative sentences: *N sabe risposta* has a present reading, 'I know the answer', whereas *N kume pexe* and *N kridita na Nhor Des* have past readings, 'I ate the fish' and 'I believed in God', respectively. The proposal in Pratas (2010) accounts for this puzzle in the following way: (i) all these predicates denote past eventualities, as an effect of a zero operator that adds a termination to atelic and a completion to telic situations; (ii) the particular property of *N sabe risposta* 'I know the answer' lies in its complex structure: it includes a past culmination, 'I got to know the answer', but its temporal reading is anchored on a consequent state (Moens & Steedman 1988), '[now] I know'. That previous proposal, however, does not provide an explanation for the nonexistence of analogous temporal readings for other situations. The present paper tackles this problem, putting forward an analysis based on Perfect State theories: (i) the zero morpheme is a null Perfect marker; (ii) only for predicates like *sabe risposta* 'know the answer' may a Perfect State be the direct result of the past eventuality, as defined in Smith (1991); I argue that this result state is part of the event structure; (iii) for other predicates, the Perfect State is merely an abstract state of the event's having occurred (Parsons 1990; ter Meulen 1995); therefore, it does not participate in the event structure and, as such, it is not part of the situation temporal schema.

Keywords: Capeverdean; statives; tense; event structure; null Perfect

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1. Introduction

In Capeverdean, a Portuguese-based Creole language¹, the lexical property of stativity does not account for the different temporal readings of predicates. This fact constitutes one further challenge to the Language Bioprogram Hypothesis (LPH, Bickerton 1981, 1984).

According to that hypothesis, Creole languages have a relative tense system, in which stativity plays a crucial role. The relevant relation for the current purposes is the following: unmarked stative verbs have a non-past reading, unmarked eventive verbs have a past reading.² Interestingly, if we compare the temporal readings of (1a) and (1b) we might conclude that Bickerton (1981, 1984) is right: the first is a bare state and has a present reading, whereas the second is a bare eventive and has a past reading.

- (1) a. *N sabe risposta.*
 1SG know answer³
 'I know the answer.'
- b. *N kume pexe.*
 1SG eat fish
 'I ate the fish.'

The problem with this generalization, however, is that other stative predicates consistently pattern with eventives regarding the interactions with temporal morphology and interpretation: their bare forms cannot have a present reading. For reasons of space, this paper focuses on *kridita* 'believe' and *lenbra* 'remember', as examples of verbs that may occur in stative situations and whose bare forms can never be interpreted as present. A list of such verbs is presented in (2), but others, which have not yet been studied, will possibly be included in future descriptions:

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1. Cape Verde is a former Portuguese colony off the West African coast.
 2. Bickerton's generalizations regarding Creole languages have been more popular among scholars outside linguistics than among linguists. In Veenstra (2008), several linguists' objections to Bickerton's views are presented. Furthermore, one recent work challenging the default values of Creoles' TMA system is van de Vate (2011), on Saamáka.
 3. List of abbreviations used in this paper: 1SG/1PL – 1st person singular/plural; ACC – accusative; COMP – complementizer; COND – conditional; FUT – future; HAB – habitual; NEG – negation; PFT – perfect; POSS – possessive; PREP – preposition; PRES – present; PROG – progressive; PST – past; QUANT – quantifier; TMA – temporal morpheme (this is used for preverbal *ta*, which has a complex modal function); TOP – topic.

- (2) *ama* 'love', *atxa* 'find' (have an opinion), *divinha* 'estimate' / 'conjecture', *gosta di* 'like', *konsigi* 'be able to', *kridita* 'believe', *lenbra* 'remember', *ntende* 'understand', *obi* 'hear', *odia* 'hate', *odja* 'see', *pensa ma* 'think that', *spera* 'hope' / 'wait', *txera* 'smell'.

For all of them, a present interpretation requires the preverbal morpheme *ta*.⁴ This is illustrated in (3), for 'believe in God'.

- (3) a. *N kridita na Nhor Des (duranti 5 anu).*
 1SG believe PREP sir god for 5 year
 'I believed in God (for 5 years).'
 [I was a believer for 5 years] [past]
 *'I believe in God.' [present]
- b. *N ta kridita na Nhor Des.*
 1SG TMA believe PREP sir god
 'I believe in God.' [I am a believer] [present]

Pratas (2010) proposed that these predicates exhibit an eventive-like behavior in this respect. This means that, just like the eventives, as illustrated in (1b), their allegedly bare forms are marked by a zero operator available in the language that adds a termination to atelic situations and a completion to telic situations. Processes are atelic situations; they are inherently unbounded. Culminated processes and culminations are telic situations; they are intrinsically bounded (they have a natural endpoint).⁵ The past reading in (1b) and in (3a) is an effect of this zero operator. As for the present reading in (1a), *N sabe risposta* 'I know the answer', the explanation is that it has a complex event structure: a subevent of the type BECOME (Dowty 1979) plus its consequent state (Moens & Steedman 1988). The culmination, marked by the same zero operator, has the meaning '[now] I got to know' (where the reference time coincides with the speech time). For the consequent state, assuming that states are true of instants of time (Taylor 1977), we have the meaning '[now] I know'.

Note that there is an important distinction between this proposal and the one in Gehrke and Grillo (2009) for the English 'know'. These authors have argued that a subevent of the type BECOME is added to a stative situation. The proposal for *sabe risposta* 'know the answer' in Pratas (2010) focuses first on the culmination.

4. No specific gloss is provided for *ta* here; the complexity of this morpheme is described in subsection 2.1.1.

5. The aspectual classes terminology used in the present paper is the one in Moens (1987) and not the one in Vendler (1957). Thus, we have processes, culminated processes and culminations, rather than activities, accomplishments and achievements.

When there is some overt information pointing to a past reading, such as the relevant temporal expressions (*onti* ‘yesterday’, *simana pasadu* ‘last week’, etc.), the temporal anchor on the consequent state is canceled and we get a past eventuality (4a). When this past reading is not assured by such information, the temporal interpretation is associated with the consequent state (4b).

- (4) a. *Onti, N sabe resposta.*
 yesterday 1SG know answer
 ‘Yesterday, I got to know the answer.’
- b. *N sabe resposta.*
 1SG know answer
 ‘I know the answer (now).’

This proposal in Pratas (2010), however, leaves a crucial question unresolved: why is this type of complex event structure not available for other predicates? More specifically, why is it that other past culminated processes, such as *kume pexe* ‘eat the fish’, or culminations, such as *txiga sedu* ‘arrive early’, do not have consequent states of the same type? In fact, the likely consequent states in these cases are, respectively, ‘[now] I have the fish eaten’ and ‘[now] I am here early’.

The goal of the present paper is threefold. First, it presents the Capeverdean data that challenge Bickerton’s (1981, 1984) generalization (Section 2). Briefly, it will be shown that in this Creole language there are stative predicates whose present interpretation requires the preverbal morpheme *ta*; this means that non-past cannot be obtained through their unmarked forms. Although the verbs under analysis, just like any other from the list in (2), may also enter eventive constructions, this study focuses on their stative occurrences, and the stative properties of these occurrences will also be shown.

Secondly, this paper argues that the complex structure of *N sabe resposta* ‘I know the answer’ is better accounted for if we assume that the zero operator (Pratas 2010) is a null Perfect (Section 3).⁶ This proposal can be summarized as follows: all allegedly bare forms of lexical verbs⁷ in root clauses are marked by a null Perfect morpheme. Perfect sentences denote a state located at reference time, which is due to the prior occurrence of a closed situation (Smith 1991: 147). I argue that only for *sabe resposta* ‘know the answer’ may a Perfect State be the

6. A null Perfect analysis has been proposed in van de Vate (2011) to explain the difference in temporal interpretation between stative (present) and non-stative (past) bare verbs in Saamáka. In Section 2.3, some differences between the two proposals are described.

7. Copula verbs and modals have a different behaviour. This will briefly be shown in the present paper for the copulas *e* BE.INDIVIDUAL-LEVEL and *sta* BE.STAGE-LEVEL.

direct result of the past eventuality (Smith 1991). This explains why this Perfect State is part of the event structure. When the Perfect State is merely an abstract state resultant of the event’s occurrence (Parsons 1990; ter Meulen 1995), this type of structure does not take place.

Finally, the present paper contends that the nonexistence of such complex event structures for predicates containing other verbs is not problematic at all, since some idiosyncrasies of ‘know’ have been attested for other languages; for instance, semantic restrictions involving ‘know’ and the Perfect have also been found in Korean (Choi 2010) (Section 4). In Section 5, some final remarks will be presented.

2. Some Capeverdean statives need *ta* for a non-past reading

This section aims at presenting the Capeverdean predicates that challenge Bickerton’s (1981, 1984) generalization (2.1) and the arguments in favor of the stative nature of these predicates (2.2).

2.1 The data that resist the stativity explanation

The Capeverdean data presented in this subsection challenge Bickerton’s (1981, 1984) generalizations on the temporal systems across Creole languages (2.1.2). Before this final purpose, however, Subsection 2.1.1 briefly describes the contributions of the overt temporal morphemes in this Portuguese-based Creole.

2.1.1 Overt temporal morphemes

Capeverdean postverbal morpheme *-ba* marks past. This is illustrated in the following contrast.

- (5) a. *N sata kume pexe.*
 1SG PROG eat fish
 ‘I am eating (the) fish.’ [answer to: *what are you doing now?*]
- b. *N sata kumeba pexe.*
 1SG PROG eat:PST fish
 ‘I was eating (the) fish.’ [answer to: *what were you doing at 1pm?*]

The temporal interpretation in (5b) can only be accounted for if *-ba*, which does not occur in (5a), brings a past meaning.⁸

8. For a more detailed argumentation in favor of the Past nature of *-ba*, see Pratas (2010).

There are two other postverbal morphemes, *-du* and *-da*, that occur in passives. Since passive constructions are beyond the scope of the present paper, I will not discuss these

The other temporal morphemes are *sata*, which marks progressive,⁹ also illustrated in (5), and *ta*, which has a complex modal/quantificational function. Both of them are preverbal. Several important observations regarding *ta* must be listed here. First, *ta* may enter future and conditional constructions with different situation types. This is illustrated in (6), with a process predicate, and in (7), with a stage-level state.

- (6) a. *N ta nada dumingu ki ta ben.*
 1SG TMA swim Sunday that TMA come
 'I will swim next Sunday.'
- b. *Si N podeba, N ta nadaba dumingu.*
 if 1SG can:PST 1SG TMA swim.PST Sunday
 'If I could, I would go swim on Sunday.'
- (7) a. *N ta sta na kaza des ora.*
 1SG TMA BE.STAGE-LEVEL PREP house ten hour
 'I will be at home by ten o'clock.'
- b. *Si N podeba, N ta staba na kaza des ora.*
 if 1SG can:PST 1SG TMA BE:PST PREP house ten hour
 'If I could, I would be at home by ten o'clock.'

Secondly, it may express habituality, a reading here illustrated with an eventive:

- (8) a. *N ta kume pexe.*
 1SG TMA eat fish
 'I eat fish.' [everyday, sometimes, habitually]
- b. *N ta kumeba pexe.*
 1SG TMA eat.PST fish
 'I used to eat fish.' [everyday, sometimes, habitually]

morphemes here. For a description of Capeverdean passives, see Pratas (2007) and Rendall (in preparation).

9. In Praia, the capital city of the country, there is another form for progressives: auxiliary *sta + ta*, like in (i):

- (i) a. *Djon sta ta papia ku bo.*
 Djon BE TMA talk with 2SG
 'Djon is talking to you.'
- b. *Djon staba ta papia ku bo.*
 Djon BE:PST TMA talk with 2SG
 'Djon was talking to you.'

The differences between the two constructions have been extensively described in Baptista (2002) and Pratas (2007).

Both interpretations in (8) denote a type of generalization that acquires properties typical of individual-level states, in the present (8a) and in the past (8b). Generics and habituais have been identified as ‘general statives’ (Smith 2003). Therefore, they have an unbounded interpretation and, assuming that states are true of instants of time (Taylor 1977), the combination with a point-like time reference naturally emerges. We can now assert that the eventuality *kume pexe* ‘eat fish’ can only be located in the present if: (i) it is expressed as ongoing (such as in (5a): *N sata kume pexe* ‘I am eating (the) fish’), or (ii) it is modified by *ta* (8a). In both cases, we have derived states: I am assuming here that (i) “the progressive operator turns sentences into stative sentences” (Vlach 1981: 284), and that (ii) habituais are general statives (Smith 1991, 2003).

Finally, as we have seen in (3b) and as will be discussed in the next subsection, with lexical verbs in basic-level stative situations, *ta* may mark present (non-habitual/generic) or future. As is certainly expected at this point, a key observation regarding *ta* is that it is incompatible with the progressive.¹⁰

The next subsection describes some Capeverdean data that defy Bickerton’s (1981, 1984) generalizations on the temporal system of Creoles; more specifically, it will be shown that some bare statives cannot have a present interpretation.

2.1.2 *Why stativity is not enough*

Bickerton’s (1981, 1984) generalizations concerning the temporal system in Creole languages may be summarized as follows:

- (9) a. Non-overtly marked stative forms have a present reading
- b. Non-overtly marked non-stative forms have a past reading

The following Capeverdean examples seem indeed to support this proposal. First, the bare copula verb in (10) denotes a stative situation and is present.

10. For more details on the meanings of *ta*, and also on the several Capeverdean environments that denote some sort of stative situations (thus, they are licit in the Present), see Pratas (2010). Also, in Pratas (2011a,b), it has been proposed that *ta* seems to involve quantification over possible worlds:

- present habitual: if nothing prevents it, ‘I eat fish (habitually)’ (universal quantification)
- future: if nothing prevents it, ‘I will eat fish (tomorrow)’ (existential quantification)

This modal contribution of *ta*, however, is still under study; more specifically, all the problems raised by a parallel between genericity/habituality and universal quantification must be considered and resolved.

- (10) *Djon e altu.*
 Djon BE.INDIVIDUAL-LEVEL tall
 'Djon is tall.'

Moreover, the examples in (1), here repeated in (11), show an important distinction: (11a) has a present reading, whereas (11b) has a past reading. Both are lexical verbs, but the first one participates in a stative situation and the second participates in an eventive situation.

- (11) a. *N sabe risposta.*
 1SG know answer
 'I know the answer.'
- b. *N kume pexe.*
 1SG eat fish
 'I ate (the) fish.'

A distinction in the temporal readings of *sabe* 'know' and *kume* 'eat', illustrated in (11) for their bare forms, has counterparts in other simple declarative sentences, marked by the overt morphemes described in 2.1.1. Observe the examples with *ta* (12):

- (12) a. *N ta sabe risposta.*
 1SG FUT / *PRES know answer
 'I will know the answer.' [future]
 *'I know the answer.' [present]
- b. *N ta kume pexe.*
 1SG FUT / HAB eat fish
 'I will eat (the) fish.' [future]
 'I eat fish.' [everyday, sometimes, habitually] [present]

When marked by *ta* in a simple declarative sentence, *sabe risposta* 'know the answer' can only have a future interpretation. In contrast, *kume pexe* 'eat (the) fish' may be present or future. Consider the following context: Maria is leaving the room and utters any of these sentences; we understand that she is going to take an action leading to get to know the answer / eat the fish. Now imagine that we are just having a conversation with Maria and she declares any of these sentences: depending on the discourse context, (12b) may either have a present or a future reading, as indicated in the English translations; as for (12a), there is no discourse context allowing for a present reading.

Now observe the examples with *-ba* (13).

- (13) a. *N sabeba risposta.*
 1SG know:PST answer
 'I knew/used to know the answer.'

- b. *N kumeba pexe.*
 1SG eat:PST fish
 *‘I ate/used to eat fish.’

The only possible meaning for (13b) is a past before past, ‘I had eaten (the) fish.’ We will return to this context in Section 3, when the null Perfect proposal is explained. Cross-linguistically, this is an anaphoric reading and, for this reason, it is odd without a context: we need a reference time prior to the speech time, the situation being prior to that reference time. For reasons of space, I will not provide here all the contexts where each reading might occur. For now, the important revelation in (13) is that *sabeba* (‘know:PST’) may have a simple past reading (in the sense that the situation time is prior to speech time), whereas *kumeba* (‘eat:PST’) may not.

As has been said before, the particular contrast between the bare forms in (10) and (11a), on the one hand, and in (11b), on the other hand, could be taken to support Bickerton’s (1981, 1984) generalization regarding the temporal systems across Creole languages. The former are stative predicates and have a present reading, the latter is an eventive and has a past reading.

Problems arise when we observe other stative situations. As has been noted in various works on Capeverdean (Silva 1985; Suzuki 1994; Baptista 2002; Pratas 2007; Borik & Pratas 2008), the unmarked forms of these predicates cannot have a present reading: their temporal interpretation is necessarily past.

- (14) a. *N lenbra tenpu di nha mosindadi.*
 1SG remember time PREP POSS.1SG youth
 ‘I remembered the time of my youth.’ [past]
 *‘I remember the time of my youth.’ [present]
- b. *N kridita na Nhor Des.*
 1SG believe PREP God.
 ‘I believed in God.’ [past]
 *‘I believe in God.’ [present]

The present tense readings are only obtained with the preverbal morpheme *ta*:

- (15) a. *Dona Juana ten 80 anu, mas e ta lenbra*
 Ms Juana have 80 year but 3SG TMA remember
tenpu di si mosindadi.
 time PREP POSS.3SG youth
 ‘Ms Juana is 80 years old, but she remembers the time
 of her youth.’ [her memory is in good health] [present]
- b. *N ta kridita na Nhor Des.*
 1SG TMA believe PREP sir god
 ‘I believe in God.’ [I am a believer] [present]

At this point, one could argue that these predicates are eventives, whose stative reading in the present is of the same nature as the generic/habitual *N ta kume pexe* ‘I eat fish.’ [everyday, habitually]. Strong evidence against this is presented in the next subsection.

2.2 Stative properties of these present situations

This subsection deals with an almost immediate question when we look at the data in (15): are the predicates under analysis real statives? Even if they are, what prevents us from saying that their stative reading in the present is of the same nature as the generic/habitual *N ta kume pexe* ‘I eat fish.’ [everyday, habitually].

One of the reasons why they cannot be considered generics/habituals is related to their syntax: they are not compatible with agent-oriented adverbials, such as *di abuzu* ‘deliberately’. As Smith has claimed, “habitual sentences do not have the syntactic characteristics of basic-level statives. They allow the forms that are related to agency and control, unlike other statives.” (Smith 1991:42) Therefore, I propose that *E ta lenbra tenpu di si mosindadi* ‘She remembers the time of her youth’ and *N ta kridita na Nhor Des* ‘I believe in God’ are basic-level statives and not generics or habituals of some sort. This holds for any stative situation with verbs from the list in (2). Two examples are presented in (16), with the statives *gosta di* ‘like’ and *atxa* ‘find’:

- (16) a. *Maria ta gosta di xokolati *di abuzu.*
 Maria TMA like of chocolate of abuse
 ‘Maria likes chocolate *on purpose / *deliberately.’
- b. *Djon ta atxa Maria bunita *di abuzu.*
 Djon TMA find Maria pretty of abuse
 ‘Djon thinks (*on purpose / *deliberately) that Maria is pretty.’

Both verbs in (16) are marked by *ta*, which conveys a present reading, and both reject agent-oriented adverbials, which shows that, semantically, they are basic-level statives.

Another reason why we know that the predicates in (15) and (16) are basic-level statives is related to their semantics: in the present tense, they need not be interpreted as generalizations or regularities (Smith 1991, 2003). Just like other non-derived states, they have no internal structure (there is no mapping of times to stages). As such, they are true of instants of time (Taylor 1977).

One aspectual test to investigate the stative behavior of predicates concerns the interactions of these with the reference times given in the discourse context. Vlach (1981:284) points out for English that “the progressive operator turns sentences into stative sentences and the defining characteristic of stative sentences is their way of interacting with point adverbials.” This is clearly observed in the following contrast:

- (17) English (Vlach 1981:273–274):
- | | | |
|----|--|---------------|
| a. | <i>Max was here when I arrived.</i> | [state] |
| b. | <i>Max was running when I arrived.</i> | [progressive] |
| c. | <i>Max ran when I arrived.</i> | [non-stative] |

Whenever the point/instant defined in the adverbial expression is able to fall within the time interval denoted by the main clause situation, this situation is of the stative type: either a basic-level stative or a derived-stative. This is shown, respectively, in (17a) and (17b): Max was already in the place/ already running before my arrival. In (17c), with a non-stative predicate (a process), Max necessarily started running at, or slightly after the moment of my arrival.¹¹

For Capeverdean, where the progressive also has a stativizing function,¹² these tests would result in aspectual operations that obscure the conclusions we are looking for. In (18), however, our goal of figuring out which predicates show a stative behavior is met when the intended instants of time are provided with recourse to a different strategy: the time reference given in a narrative.¹³ This narrative aligns some punctual occurrences in the present tense, making it possible to understand whether there is the above mentioned inclusion relation or a sequential interpretation of events. This method allows us to figure out which predicates reveal properties typical of stative situations. Stative situations are the ones that, coming in second place in each narrative line, hold for a period of time that includes the described punctual event, e.g. ‘a man enters the bar’. In other words, they are true of that instant of time. Since similar predicates may correspond to distinct situation types across languages, the relevant interpretation of the second predicate in these Capeverdean examples is provided.

11. An anonymous reviewer pointed out that: “Smith (1997: 49) gives the following examples: *John was dumbfounded when Harry threw the glass* – s/he argues that this has a sequential reading parallel to *Max ran when I arrived*, in addition to its overlapping reading, and yet it is stative.” This is not relevant here, since the relation that is to be proven may be stated in these terms: whenever a sequential reading is imposed (in other words, whenever an overlapping reading is prohibited), this means that we have a dynamic /eventive situation. This does not make any predictions about the possible sequential readings of stative situations.

12. Vlach states that this “is not just one fact about the progressive; this is what progressive is FOR” (Vlach 1981:284). In other words, the “function of the progressive operator is to make stative sentences [...]” (Vlach 1981:274). This function of the progressive has been assumed for Capeverdean in Pratas (2010).

13. For the relevant interactions between situation types in narratives, see Moens (1987) and Smith (2003).

- (18) a. *Un omi ta entra na bar. E sta duenti.*¹⁴
 one man PRES enter PREP bar. 3SG BE sick
 ‘A man enters the bar. He is sick.’
 [basic-level state – overlapping]
- b. *Un omi ta entra na bar. E sata kume banana.*
 one man PRES enter PREP bar. 3SG PROG eat banana
 ‘A man enters the bar. He is eating a banana.’
 [progressive / derived state – overlapping]
- c. *Un omi ta entra na bar. E ta kume banana.*
 one man PRES enter PREP bar 3SG PRES eat banana
 ‘A man enters the bar. He eats the banana.’
 [culminated process – sequence]
- d. *Un omi ta entra na bar. E sabe risposta.*
 one man PRES enter PREP bar. 3SG know answer
 ‘A man enters the bar. He had (already) come to know the answer. /
 He knew the answer.’
 Ambiguous: [culmination – reverse sequence] or [state – overlapping]
- e. *Un omi ta entra na bar. E ta kridita
 na Nhor Des.*
 PREP God
 ‘A man enters the bar. He believes in God.’
 [basic-level stative – overlapping]
- f. *Un omi ta entra na bar. E ta lenbra
 si mosindade.*
 his youth
 ‘A man enters the bar. He remembers the time of his youth.’
 Ambiguous: [culmination – sequence] or [state – overlapping]

Summarizing the relevant results of this test, we have: (i) *kridita na Nhor Des* ‘believe in God’ in (18e) clearly yields a stative interpretation; the man already believed in God when he entered the bar (in the same fashion that he also was sick (18a) / was eating a banana (18b)); (ii) with *lenbra si mosindadi* ‘remember

14. In Capeverdean narratives, the present tense may have a non-generalizing interpretation (see Smith 2003 for a discussion on the various aspectual entities and tense in different discourse modes in English). This is also important for the present purposes, since the clauses with eventive predicates marked by *ta* do not have the generic or habitual reading that is expected for the same sentences outside a narrative sequence. This is the case of the first clause in each example, and also the second clause in (18c) and in (18f) (for the latter, this is the case when we focus on the culmination reading).

his youth', in (18f), a culmination reading is preferred (we have a sequence); (iii) crucially, for *sabe risposta* 'know the answer', in (18d), the culmination is preferred and we have a sequence in reverse; he got to know the answer before he enters the bar. This strikes a clear contrast with the other predicates and emphasizes the interpretative prominence of the prior culmination 'get to know'. Note that the specific restrictions imposed by each predicate have been respected: for the necessary present interpretation with the verbs *lenbra* 'remember' and *kridita* 'believe', the obligatory morpheme *ta* has been used. If it were used with *sabe* 'know', the reading would be 'he will know the answer'.

This section has demonstrated that *kridita na Nhor Des* 'believe in God' and *lenbra si mosindadi* 'remember his youth' are basic-level statives: (i) they are not compatible with agent-oriented adverbials; (ii) in simple sentences in the present tense, they are not interpreted as regularities or generalizations and yet they are true of instants of time (Taylor 1977). These properties hold for any other verb from the list in (2).

Therefore, we can now positively assert that not all Capeverdean states obey Bickerton's (1981, 1984) generalization regarding the temporal interpretation of their bare forms. Even when they participate in basic-level stative situations, the unmarked forms of the lexical verbs listed in (2) cannot have a present interpretation. Again, it is important to stress that these verbs can also occur in non-stative predicates, but these eventive situations are not relevant for the current discussion.

The temporal readings for the combinations of different Capeverdean predicate types with the various morphemes are summarized in Table 1.

Table 1. Temporal readings of different verb types combined with the different morphemes, in simple sentences and in out of the blue contexts

	<i>Unmarked</i>	<i>-ba</i>	<i>ta</i>	<i>ta + -ba</i>	<i>sata</i>	<i>sata+-ba</i>
<i>sta duenti</i> 'be sick' (stage-level)	PRES	PST	?FUT	?COND	–	–
<i>e altu</i> 'be tall' (individual-level)	PRES	–	–	–	–	–
<i>sabe risposta</i> 'know the answer'	PRES	PST	FUT	?COND	–	–
<i>kridita na Nhor Des</i> 'believe in God'	PST	? PST PFT	PRES	PST	–	–
all eventives	PST	? PST PFT	PRES HAB	PST HAB	PROG	PST PROG

- (i) – means that these combinations are either impossible or odd in out of the blue contexts.
 - (ii) The combination of *ta* or *-ba* with *e* 'be' does not exist. For a past reading, there is the form *era* 'was', such as in *Djon era altu* 'Djon was tall'
 - (iii) The question mark for the combination of *sta duenti* or *sabe risposta* with *ta* or with *ta+-ba*. means that, if these simple sentences occur in out of the blue contexts, which is not common, Future or Conditional, respectively, is their only possible interpretation
- The same applies to the question mark for the combination of 'believe', just as all the verbs listed in (2), or all eventives with *-ba*.

The next section presents the analysis in Pratas (2010) and elaborates on the proposal that the zero operator is, in fact, a null Perfect morpheme.

3. The relevant state is a Perfect state

In Pratas (2010) it has been argued that *sabe risposta* ‘know the answer’ has a complex event structure: a culmination + a consequent state (Moens & Steedman 1988). The culmination ‘got to know / found out the answer’ functions here as a subevent of the type BECOME (Dowty 1979), the temporal reading of the sentence being anchored on the consequent state. In this case, it coincides with the speech time, ‘[now] I know’. In (19), we have the same type of relation between an event and its consequent state, with the only difference that the temporal anchor precedes the speech time – this temporal anchor is visible here in the past morpheme *-ba*.

- (19) *N sabeba risposta.*
 1SG know:PST answer
 ‘I knew the answer.’

The problem that is left unsolved by that proposal is the following: why is an equivalent consequent state not available for other telic situations? Compare the possible consequent states for the sentences in (20), the culminated process that we have been discussing, in (20a), and a culmination, in (20b):

- (20) a. *N kume pexe.*
 1SG eat fish
 ‘I ate (the) fish’
 b. *N txiga sedu.*
 1SG arrive early
 ‘I arrived early.’

As has been mentioned earlier, there are, indeed, consequent states for these past events, namely ‘[now] the fish is eaten’ and ‘[now] I am here early’. These are not, however, of the same sort as the one for *sabe risposta* ‘know the answer’. What is the reason for this distinction?

In the present paper I propose that the zero operator marking these so-called bare verb forms is, in fact, a null Perfect. Assuming a Perfect analysis for these contexts provides a straightforward explanation for the question just mentioned: only for *sabe risposta* ‘know the answer’ may a Perfect State be the direct result of the past eventuality.

Before we proceed with the implications of this proposal, however, two clarifications are needed. First, the Perfect is not to be confused with Perfective, which refers to a closed aspectual viewpoint (Smith 1991:147). The Perfect is a semantically complex category that involves certain temporal and aspectual characteristics; crucially, a perfective viewpoint is part of this semantic complexity, since Perfect constructions denote a state located at Reference Time, and this state is due to the prior occurrence of a closed situation. Portner (2003) similarly clarifies this distinction between the Perfect and perfective aspect, declaring that the “latter has to do with notions like the completion/non-completion of events, or whether they are viewed as an unanalyzed whole (e.g. Comrie 1976; Smith 1991; Kamp & Reyle 1993; Singh 1998).” (Portner 2003:466) The author upholds that “the English perfect is perfective”, a characteristic that “it shares with the simple past”.

Secondly, a null Perfect analysis has been proposed in van de Vate (2011) to explain the difference in temporal interpretation between stative (present) and non-stative (past) verbs in Saamáka. Although there are some significant similarities between the two Creole languages, there are also some important distinctions regarding their tense and aspectual systems. Therefore, the null Perfect analysis proposed here for Capeverdean is built on different grounds and has several distinct implications. For instance, van de Vate (2011) shows that Saamáka unmarked non-statives convey a perfect experiential reading and unmarked statives may have a perfect universal reading (van de Vate 2011:48). The latter could not be the case in Capeverdean, since: (i) bare statives with copula verbs, like *e altu* ‘be tall’, can never have a perfect interpretation – they are straightforwardly present; (ii) the bare forms of lexical verbs that may enter stative constructions, such as the ones listed in (2), always have a past interpretation (thus, they do not have a universal perfect reading); (iii) cases like *sabe risposta* ‘know the answer’ or *konxe Lisboa* ‘know/be familiar with Lisbon’ could be the ones analyzed as having a universal perfect reading; however, I argue that the current proposal, based on a complex structure of these situations, seems to better account for the distinct temporal meaning of these Capeverdean predicates.

Assuming for Capeverdean that the zero morpheme functions as a null Perfect marker has many interesting consequences. It accounts for the distinct temporal readings in the following way: (i) all bare forms of lexical verbs in root clauses are marked with a null Perfect, be they stative or non-stative (thus, it is not the case that these stative predicates show an eventive-like behavior, since stativity is not a key property here); (ii) the distinct temporal readings depend on the type of Perfect State located at Reference Time. I propose that for *sabe risposta* ‘know the answer’, the Perfect State is a type of consequent or result state

(Moens & Steedman 1988; Smith 1991). Moreover, I argue that this consequent / result nature causes this Perfect State to be part of the complex structure of a situation. On the other hand, even for other eventive predicates that involve culminations, like *kume pexe* ‘eat the fish’ (culminated process) or *txiga sedu* ‘arrive early’ (culmination), the Perfect State is a type of resultant state (Parsons 1990; ter Meulen 1995). As Portner (2011) puts it, the “resultant state is to be distinguished from a result state. A resultant state is not an ordinary state which has been caused by the past event described by the sentence, but rather a kind of abstract state of the event’s ‘having occurred.’” (Portner 2011: 1230) In the latter case, the Perfect State is not part of the event structure.

Note that, for both instances, we obtain a relation between Event Time and Reference Time as defined in Reichenbach (1947):

Present Perfect: $e < r, s$ (Event Time < Reference Time, Speech Time)

Past Perfect: $e < r < s$ (Event Time < Reference Time < Speech Time)

Not surprisingly, the relevant temporal relation – Event Time precedes Reference Time – is apparently clearer for *kume pexe* ‘eat the fish’ than for *sabe risposta* ‘know the answer’.¹⁵ This is so because, as has just been argued, the latter situation has a more complex temporal schema, which includes the Perfect State.

This temporal relation is illustrated in (21) for the Past Perfect:

- (21) a. *Kantu mi era nobu, N ta pensaba*
 When 1SG was young, 1SG TMA think:PST
ma N sabeba tudu risposta.
 that 1SG know:PST all answer
 ‘When I was young, I used to think I knew all the answers.’

15. For the current purposes, a null Perfect analysis intends to account for the distinct temporal readings of bare verbs in Capeverdean. Cross-linguistically, the Perfect may have different readings (existential, universal, continuative, etc.) that are related, among other things, to the Akkionsart of predicates. For a recent overview on the different readings of the English Perfect, see Portner (2011).

Although there is an ongoing study of the different Perfect readings in Capeverdean, it is beyond the scope of the present paper. However, I acknowledge that this ongoing research must deal with the fact that *lenbra* ‘remember’, *kridita* ‘believe’ or any other verb of the list in (2) may also occur in eventive situations, which will probably bring consequences to the different Perfect readings available for each of them. Also, there are several differences across languages regarding the interaction of the Perfect with temporal adverbials. This must also be studied for Capeverdean.

- b. *Di noti N fika mariadu. N kumeba txeu pexe na djanta.*
 at night 1SG get sick. 1SG eat:PST lot fish at dinner
 ‘In the evening I got sick. I had eaten a lot of fish for dinner.’

Finally, the perfective viewpoint involved in Perfect constructions (Smith 1991: 148–149) accounts for the previously mentioned effects of a zero operator. In Pratas (2010) it has been proposed that this zero morpheme adds a termination to atelic situations and a completion to telic situations. Under the null Perfect analysis, we have the notion of a prior occurrence of a closed situation – the specific perfective viewpoint aspect that is part of this semantically complex category.¹⁶

In this section, I have argued that the complex structure of predicates of the type *N sabe risposta* ‘I know the answer’ is better accounted for if we assume that the zero operator (Pratas 2010) is a null Perfect morpheme. This proposal also provides a uniform explanation for the past readings of bare eventives, be they telic or atelic, and of basic-level statives.

As a final note to this proposal, it is important to show that, just like has been argued in Pratas (2010), this zero operator/null Perfect is in complementary distribution with the progressive marker *sata*. Observe the contrasts in (22) and (23):

- (22) a. *N kume pexe.*
 1SG eat fish
 ‘I ate (the) fish.’
- b. *N sata kume pexe.*
 1SG PROG eat fish
 ‘I am eating (the) fish.’ [answer to: *what are you doing now?*]

16. Observe one bare eventive closed situation, with an atelic verb:

- (i) ??*Djon nada i inda e sata nada.*
 Djon swim and still 3SG PROG swim
 ‘Djon swam and he is still swimming.’

This example is odd, for a continuation to a closed situation is not expected. In other words, we know that a perfective aspect is at stake here, even though it is the perfective aspect that is part of the Perfect. As opposed to this, *Djon nada parmanha interu i inda e sata nada* ‘Djon swam all morning and he is still swimming’ is good. Here we have two distinct events: “Djon swam all morning” is one clearly closed/bounded event (the morning, an argument of this event, has ended) and “Djon is still swimming” is another. In other words, no continuation is at issue.

- (23) a. *N kumeba pexe.*
 1SG eat:PST fish
 'I had eaten (the) fish'
- b. *N sata kumeba pexe.*
 1SG PROG eat:PST fish
 'I was eating (the) fish.' [answer to: *what were you doing at 1pm?*]

In (22), we have a temporal reference in the present, with the Perfect and the Progressive defining the event time: in (22a), the Perfect construction, the event time precedes the reference time; in (22b), the Progressive construction, the event time overlaps the reference time. In (23), the relations between event time and reference time are just the same as described for (22); the difference is that we have a temporal reference in the past: in (23a), the event time precedes a past time reference; in (23b), the event time overlaps a past time reference.¹⁷

In the next section, an approach to 'know' in Korean is brought into the discussion. The purpose is to show that the semantic restrictions involving the Perfect and this particular verb have been attested in a different language. Therefore, it is not surprising that the Perfect State related to *sabe risposta* 'have known the answer' is distinct from the ones obtained in other situations. There are, however, some differences between Choi (2010) and the current proposal.

4. Cross-linguistic idiosyncrasies of 'know'

In her study about the different types of stative predicates in Korean, Choi (2010) shows that the Perfect marker in this language, *-ess*, when combined with an emotive verb like 'love', *salangha*, has a past reading (24), but when combined with the mental verb 'know', *al*, it may have a present reading (25).

- (24) *Juno-nun Yuna-lul olaecene/*cikum salangha-ss-ta.*
 Juno-TOP Yuna-ACC a long time ago / now love-PFT-DEC
 'Juno loved Yuna a long time ago/*now.'
- (25) *Minho-nun ku sasil-ul olaecene/cikum al-ass-ta.*
 Minho-TOP the fact-ACC a long time ago / now know-PFT-DEC
 'Minho found out / is aware of the fact a long time ago / now.'

17. In Pratas (2011a,b), these perfect/progressive distinctions have been represented in the terms defined in Demirdache and Uribe-Etxebarria (2007), who follow Klein's (1995) notions of tense (a relation between reference time and the time of utterance) and aspect (a relation between reference time and event time).

For Choi (2010), the relevant generalization is the following: atelic predicates + *-ess* = existential past; telic predicates + *-ess* = result state. She then proposes that Korean ‘know’ behaves as a telic predicate, an idea that is reinforced by the following contrast: whereas ‘love’+*-ess* is compatible with expressions of the type ‘for X time’ and incompatible with the ones of the type ‘in X time’ (thus, the combination is atelic), ‘know’+*-ess* is compatible with expressions of the type ‘in X time’, which could lead to the conclusion that Korean ‘know’ is telic. The test with ‘since X time’, however, shows that *al* ‘know’+*-ess* patterns with atelics (26).

- (26) *Juno-nun ku pati-ihu ku sasil-ul al-ass-ta.*
 J-TOP the party-since the fact-ACC know-PFT-DEC
 ‘Juno has known the fact since the party.’

Choi (2010) argues that ‘know the fact’ (along with states like ‘be old’)¹⁸ is an inchoative state: it is compatible with ‘since X time’ adverbials because it denotes the inception of a state and it is compatible with ‘in X time’ adverbials because it describes a time of transition. The author follows Bar-el’s (2005) study for Squamish Salish in assuming that, like all (underived) Squamish Salish stage-level states, the Korean inchoative states have an inception (initial boundary), but no culmination (final boundary) in their meanings.

In Capeverdean, *sabe* ‘know’ + null Perfect is also compatible with any of these adverbial expressions. The current proposal, however, predicts a different description of these facts. Consider the following examples:

- (27) *E sabe risposta na tres minutu.*
 3SG know answer PREP three minute
 ‘He got to know / found out the answer in three minutes.’
- (28) *E sabe risposta desdi simana pasadu.*
 3SG know answer PREP week last
 ‘He has known the answer since last week.’

I argue that, in (27), the ‘in X time’ expression has a similar function as ‘yesterday’ adverbials; it cancels any temporal anchor on the Perfect State, and we have a past interpretation, such as in *kume pexe* ‘ate the fish’. In other words, there is nothing that distinguishes this from other telic predicates in the Perfect. Therefore,

18. I do not include these verbs in the discussion here, since in Capeverdean ‘be old’ and ‘get old’ are denoted by different expressions: the first one is a state (either stage-level, *sta bedju*, or individual-level, *e bedju*), and the second one is not; it includes a culmination of the ‘get’ type, *fika bedju* or *bira bedju*. Therefore, the latter, both meaning ‘get old’, are true inchoatives in the sense defined in Smith (1991:44): ‘John got angry’, ‘Mary became tired’.

the notion of an inchoative state is not relevant here. In (28), the ‘since X time’ expression reinforces the temporal anchor on the Perfect State, here analyzed as “a state due to the occurrence of the situation mentioned” (Smith 1991:148). We are informed that the relevant prior situation occurred last week, but the temporal reading of the sentence is present. If this is on the right track, we do not need the independent notion of an inception to the state of knowing. This notion accounts for the fact that this state has an initial boundary; however, at least for Capeverdean, it does not explain the possible present reading of its bare form. We may contrast this with another example, with a basic-level stative.

- (29) *N *(ta) kridita na Nhor Des desdi anu pasadu.*
 1SG TMA believe PREP sir god PREP year last
 ‘I believe in God since last year.’ [I am a believer] [present]

In (29), the initial boundary of the state is also expressed, and yet it needs *ta* to have a present interpretation.

Furthermore, the initial boundary of present *sabe* ‘know’ may seem very clear in (28), because of the ‘since X time’ expression, but it is much less clear in the absence of this expression, like in (30).

- (30) *Pedru so ten 4 anu mas e sabe konta ti 20.*
 Pedru only have 4 year but 3SG know count until 20
 ‘Pedru is only 4 years old but he can count until 20.’

Consequently, I argue that this notion is intrinsic to the properties of the particular type of Perfect State available for *sabe* ‘know’.

In this section I have brought Choi’s (2010) analysis of ‘know’ in Korean into the discussion. This has been done to show that the semantic restrictions involving the Perfect and this particular verb have been attested in a different language. There is, however, a crucial distinction between her analysis and the one proposed in this paper: the null Perfect proposal described here accounts for all types of situations with lexical verbs, be they telic or atelic. The distinct temporal interpretations depend on the nature of the Perfect State. Additionally, it dispenses with the independent notion of an inception to the state of knowing, for this notion, by itself, does not account for the fact that other bare statives with an inception description cannot have a present interpretation.

5. Final remarks

Stativity, as a lexical property of some predicates, does not account for the following temporal contrast in Capeverdean: *N sabe risposta* ‘I know the answer’

(present) vs. *N kume pexe* ‘I ate the fish’ (past). In fact, some predicates that show a semantic behavior typical of states pattern with eventives in this respect. This is the case with *N kridita na Nhor Des* ‘I believed in God’ and *N lenbra nha mosindadi* ‘I remembered my youth’ (past).

The current proposal accounts for this puzzle in the following way: all allegedly bare forms of lexical verbs in simple sentences, be they eventive or stative, are marked by a null Perfect morpheme. Perfect sentences denote a state located at reference time, which is due to the prior occurrence of a closed situation (Smith 1991: 147). Thus, they have a perfective aspect. I argue that only for *sabe risposta* ‘know the answer’ may a Perfect State be the direct result of the past eventuality (Smith 1991). I argue that this direct result nature explains why this Perfect State is part of the event structure. When the Perfect State is, as Portner (2011) puts it, an abstract state of the event’s ‘having occurred’ (Parsons 1990; ter Meulen 1995), it does not participate in the event structure.

This Perfect proposal has only tackled the distinct temporal readings of Capeverdean predicates. In future studies, the different interpretations of the Perfect and their modal implications shall be described.

References

- Baptista, Marlyse. 2002. *The Syntax of Cape Verdean Creole, the Sotavento varieties*. Amsterdam/Philadelphia: John Benjamins.
- Bar-el, Leora. 2005. Aspectual Distinctions in Skw̄w̄7mesh. Ph.D. dissertation, University of British Columbia.
- Bickerton, Derek. 1981. *Roots of Language*. Ann Arbor: Karoma.
- Bickerton, Derek. 1984. The language bioprogram hypothesis. *The Behavioral and Brain Sciences* 7, 173–88.
- Borik, Olga & Fernanda Pratas. 2008. “Stativity and Temporal Interpretation in CV”. Paper presented at Formal Approaches to Creole Studies (FACS), Tromsø, November 2008.
- Choi, Jiyoung. 2010. “The puzzle of stative predicates in Korean”. Ms. 7th Workshop on Syntax and Semantics (WoSS7), Université de Nantes.
- Comrie, Bernard. 1976. *Aspect*. Cambridge: Cambridge University Press.
- Demirdache, Hamida & Miryam Uribe-Extebarria. 2007. The syntax of time arguments. *Lingua* 117, 330–366.
- Dowty, David R. 1979. *Word meaning and Montague grammar*. Dordrecht: Kluwer.
- Gehrke, Berit & Nino Grillo. 2009. “How to become passive”. *Exploration of Phase Theory: features, arguments, and interpretation at the Interfaces* ed. by Kleanthes Grohmann, 231–268. Berlin: De Gruyter.
- Kamp, Hans & Uwe Reyle. 1993. *From discourse to logic: Introduction to modal theoretic semantics of natural language, formal logic and discourse representation theory*. Dordrecht: Kluwer.
- Klein, Wolfgang. 1995. “A time relational analysis of Russian aspect.” *Language* 68, 525–552.

- ter Meulen, Alice. 1995. *Representing Time in Natural Language: The Dynamic Interpretation of Tense and Aspect*. Cambridge, Mass: MIT Press.
- Moens, Marc. 1987. *Tense, Aspect and Temporal Reference*. Ph.D. dissertation, Edinburgh University.
- Moens, Marc & Mark Steedman. 1988. "Temporal ontology and temporal reference". *Computational Linguistics*, 15–28.
- Parsons, Terence. 1990. *Events in the Semantics of English: A Study of Subatomic Semantics*. Cambridge, Mass: MIT Press.
- Portner, Paul. 2003. *Linguistics and Philosophy* 26, 459–510.
- Portner, Paul. 2011. "Perfect and progressive". *Semantics: An International Handbook of Natural Language Meaning* ed. by Claudia Maienborn, Klaus von Heusinger and Paul Portner, 1217–1261. Berlin: Mouton de Gruyter.
- Pratas, Fernanda. 2007. *Tense Features and Argument Structure in Capeverdean Predicates*. Ph.D. dissertation, Universidade Nova de Lisboa.
- Pratas, Fernanda. 2010. "States and Temporal Interpretation in Capeverdean". *Romance Languages and Linguistic Theory 2008 – Selected papers from Going Romance Groningen 2008* ed. by Bok-Bennema, Reineke, Brigitte Kampers-Manhe & Bart Hollebrandse, 215–231. Amsterdam/Philadelphia: John Benjamins.
- Pratas, Fernanda. 2011a. "Tense and Aspect: interactions in Capeverdean." Paper presented at Chronos 10, Birmingham, April 2011.
- Pratas, Fernanda. 2011b. "Temporal and event interpretation. in Capeverdean". Paper presented at TMEI (Temporal, modal and event interpretation in natural language discourse), Açores, June 2011.
- Reichenbach, Hans. 1947. *Elements of Symbolic Logic*. New York: Macmillan.
- Rendall, Helderlyse. (in preparation). *Aspects of Passives in Capeverdean*. MA dissertation, Universidade Nova de Lisboa.
- Silva, Izione S. 1985. *Variation and Change in the Verbal System of Capeverdean Crioulo*. Ph.D. dissertation, Georgetown University.
- Singh, Mona. 1998. "The Semantics of the Perfective Aspect". *Natural Language Semantics* 6, 171–199.
- Smith, Carlota. 1991. *The Parameter of Aspect*. New York: Kluwer.
- Smith, Carlota. 2003. "Aspectual entities and tense in discourse." *The Syntax, Semantics and Acquisition of Aspect* ed. by P. Kempchinsky and S. Roumyana. Dordrecht: Kluwer.
- Suzuki, Miki. 1994. "The markers in Cape Verdean CP". Ms, CUNY.
- Taylor, Barry. 1977. Tense and continuity. *Linguistics and Philosophy* 1:2, 199–220.
- van de Vate, Marleen. 2011. *Tense, Aspect and Modality in a radical creole: The case of Saamáka*. Ph.D. dissertation, University of Tromsø.
- Veenstra, Tonjes. 2008. "Creole Genesis: The Impact of the Language Bioprogram Hypothesis." *The Handbook of Pidgin and Creole Studies* ed. by Silvia Kouwenberg & John Victor Singler, 219–241. Oxford: Blackwell.
- Vendler, Zeno. 1957. "Verbs and times". *The Philosophical Review* 66:2, 143–160. [reprinted in Vendler, Zeno. 1967. "Verbs and times". *Linguistics in philosophy* ed. by Zeno Vendler, 97–121. Ithaca: Cornell University Press.]
- Vlach, Frank. 1981. "The Semantics of the Progressive". *Syntax and Semantics 15: Tense and Aspect* ed. by P. Tedeschi & A. Zaenen, 271–292. New York: Academic Press.